

REMARKS

Reexamination and reconsideration of the subject application are respectfully requested in light of the comments which follow.

As correctly noted in the Office Action Summary, claims 1-3, 7, 8, 12, 13 and 17-19 were pending. The claims have not been amended by the present response. Thus, upon entry of the present response, claims 1-3, 7, 8, 12, 13 and 17-19 remain pending and await further consideration on the merits.

Applicant wishes to thank Examiner Kilkenny for the courtesies extended to applicant's representative during a personal interview conducted on January 11, 2007. During the interview, the background and state of the art relevant to the present invention were discussed. In addition, the deficiencies with respect to the applied prior art was also discussed. Namely, none of the applied prior art contains any recognition, or suggestion, of shade matching a structural component such as a ceramic cuff to match the shade of a dental prosthesis associated therewith.

CLAIM REJECTIONS UNDER 35 U.S.C. §102

Claims 1-3 and 17 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,989,026 to Rogers et al. (hereafter "*Rogers et al.*") on the grounds set forth in paragraph 3 of the Official Action. For at least the reasons noted below, this rejection should be withdrawn.

The present invention is directed to an improved abutment for a dental prosthesis, and related restoration systems and methods. As discussed, for example, in paragraph [0009] of the present specification, restoration systems are available which are composed of a metallic core, and an outer section or cuff made

from a ceramic. However, as discussed, for example, in paragraph [0013] of the specification, such conventional abutments are typically available in one standard color chosen by the manufacturer without any consideration given to the color of the attached dental prosthesis. Thus, a match between the color of the cuff and the attached prosthesis is not achieved. An additional complication of the prior art arrangement is discussed in paragraphs [0011]-[0012]. Namely, the color of the ceramic cuff and the color of the attached prosthesis, when not matched, combine to create the color of the final restoration. Thus, the technician must exercise a high degree of skill and take into consideration the color of the underlying ceramic cuff in order to produce a restoration having the desired final coloration. The present invention avoids this and other difficulties associated with the prior art. An implant abutment formed according to the present invention is set forth in claim 1. Claim 1 recites:

1. *An implant abutment for attaching a ceramic dental prosthesis within a patient's mouth, comprising:
a core; and
a ceramic cuff surrounding the core, wherein the cuff is colored to match the color of the dental prosthesis.*

A dental implant restoration system formed according to the principles of the present invention as set forth in claim 7. Claim 7 recites:

7. *A dental implant restoration system comprising:
an implant fixed within a patient's jaw;
an abutment having a core and a ceramic cuff surrounding the core, fixed to the implant; and
a ceramic dental prosthesis fixed to the abutment,
wherein the abutment cuff is colored to match the color of the dental prosthesis.*

Similarly, the method performed according to the present invention is set forth in claim 12:

12. A method for fabricating a dental implant restoration comprising: fixing an implant within the jawbone of a patient; fixing an abutment having a core and a ceramic cuff surrounding the core, to the implant; and fixing a ceramic dental prosthesis to the abutment, wherein the abutment cuff is colored to match the color of the dental prosthesis.

Rogers et al. is directed to a ceramic two-piece dental abutment of the type discussed above in paragraph [0009] of the present specification. Namely, *Rogers et al.* discloses an arrangement comprising a tubular metallic core surrounded by a ceramic outer portion. However, *Rogers et al.* is entirely devoid of any disclosure whatsoever regarding the coloration of the ceramic outer portion being provided to match the coloration of an attached dental prosthesis. Instead, the teachings of *Rogers et al.* is entirely consistent with the discussion contained in the background section of the present specification:

The outer portion, which can be aluminum oxide, is a lighter color than the typical titanium metal used for abutments. Thus, by using the lighter colored ceramic, the gingival tissue remains closer to its natural color than when the darker titanium is used. [column 2, lines 20-24]

Thus, *Rogers et al.* teaches shielding the shadow created by the metallic core via the alumina ceramic cuff, as is discussed on lines 9-10 of the paragraph [0009] of the present specification. The arrangement taught by *Rogers et al.* suffers from the same disadvantages of similar prior art arrangements in that the cuff is not colored in a manner to match the color of the attached prosthesis. Thus, just as discussed in paragraphs [0011]-[0012], the divergent coloration of the ceramic cuff will influence the overall final coloration of the implant. Namely, the attached prosthesis, when made from a ceramic, will have an inherent translucency. The coloration of the ceramic cuff portion thus will have a visible effect on the final overall

coloration of the implant. This necessitates the exercise of a relatively high degree of skill by a technician to take into consideration the underlying divergent color of the ceramic cuff and its effects when combined with the coloration of the attached prosthesis.

Rogers et al. clearly fails to anticipate the implant abutment of claim 1.

In paragraph 3 of the Official Action, with regard to the interpretation of claim 1, it is asserted that:

... the intended use in conjunction with a ceramic dental prosthesis as recited in the preamble of the claim is given no patentable weight.

Although the above-quoted statement evidences that a certain portion of the preamble has been ignored, there is no explanation given as to the interpretation of the following portion of claim 1.

... wherein the cuff is colored to match the color of the dental prosthesis.

In light of the above, applicant respectfully requests clarification as to how the above-quoted phrase, which does not appear in the preamble, is being interpreted.

It is further alleged in paragraph 3 of the Official Action that:

Also regarding claim 1, the color matching of the cuff is inferentially claimed as an infinite number of prosthesis teeth satisfy the claim. As such, the abutment of *Rogers et al.* satisfies the claimed structural limitations.

Applicant again must request clarification with regard to the position behind the above-quoted statement. First, applicant does not understand what is intended by the phrase "inferentially claimed." First, it is respectfully submitted that the color matching of the cuff is not inferentially claimed by the present application, but rather is explicitly recited and contained in the claims of the present application. If the

Examiner is referring to the content of *Rogers et al.*, it appears that the above-quoted position is really one of inherency. Namely, the above-quoted statement acknowledges that *Rogers et al.* expressly fails to disclose each and every element required by claim 1. Nevertheless, the position taken in paragraph 3 of the Official Action appears to be that *Rogers et al.* inherently satisfies the requirements of claim 1. Applicant respectfully requests confirmation of the grounds for rejection.

In the event that the grounds for rejection rest upon an assertion of inherency, applicant notes the stringent legal standard which must be satisfied in order to make out a *prima facie* case of anticipation based upon an assertion of inherency. As set forth in MPEP §2112:

In relying upon the theory of inherency, the Examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art. *Ex parte Levy*, 17 USPQ2d 1461, 1464 (BPAI 1990).

The grounds for rejection fail to explain how the teachings of *Rogers et al.* lead to the conclusion that the abutment is necessarily shade-matched to the prosthesis.

In light of the above, it is respectfully submitted that *Rogers et al.* fails to anticipate claim 1, either explicitly or implicitly. Reconsideration and withdrawal of the rejection is respectfully requested.

Claims 2-3 and 17 depend from claim 1. Thus, these claims are also distinguishable over *Rogers et al.* for at least the same reasons as noted above.

CLAIM REJECTIONS UNDER 35 U.S.C. §103

Claim 1 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Rogers et al.* on the grounds set forth in paragraph 5 of the Official Action. For at least the reasons noted below, this rejection should be withdrawn.

The grounds for rejection recited in paragraph 5 of the Official Action rest solely upon an insertion that the differences between *Rogers et al.* and claim 1 are well known and readily practiced in the art. Thus, as explained in MPEP §2144.03, the grounds for rejection are clearly improper:

It is never appropriate to rely solely "common knowledge" in the art without evidentiary support in the record, as the principle evidence upon which a rejection was based. *Zurko*, 258 F.3d at 1385, 59 USPQ2d at 1697 ("[T]he Board cannot simply reach conclusions based on its own understanding or experience - or on its assessment of what would be basic knowledge or common sense. Rather, the Board must point to some concrete evidence in the record in support of these findings.

Applicant specifically challenges the assertion that it is well known and readily practiced in the art to match the color of a cuff with an attached dental prosthesis. As explained above, it is applicant's understanding that the common practice in the art is for manufacturers to provide cuffs having one standard color, which is not selected to match the color of the attached prosthesis. Thus, applicant respectfully requests that the Examiner cite some form of documentary evidence in support of the above-quoted assertion. Having challenged the above-quoted factual assertion, applicant notes that the Examiner must provide documentary evidence in support of the grounds for rejection in the next Official Action in order to maintain the rejection:

If applicant adequately traverses the Examiner's assertion of official notice, the Examiner must provide documentary evidence in the next Office Action if the rejection is to be maintained. (See MPEP §2144.03)

Claims 7, 8, 12, 13, 18 and 19 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Rogers et al.* in view of U.S. Patent No. 6,309,568 to Hinds (hereafter "*Hinds*") on the grounds set forth in paragraph 6 of the Official Action. For at least the reasons noted below, this rejection should be withdrawn.

Hinds is applied as allegedly teaching a ceramic prosthesis 80 used in conjunction with a dental implant and abutment system. The grounds for rejection do not assert that *Hinds* contains any teaching whatsoever with regard to the coloration of the cuff of a dental abutment system. In fact, it is explicitly stated in paragraph 6 of the Official Action that the rejection of claims 7 and 12 rest upon the same assertions concerning the teachings of *Rogers et al.* as the anticipation and obviousness rejections of claim 1. Specifically, it is asserted in paragraph 6 of the Official Action that:

Regarding claims 7 and 12, the color matching of the cuff is inferentially claimed as an infinite number of prosthesis teeth satisfy the claim. As such, the abutment of *Rogers et al.* satisfies the claimed structural limitations.

Again, as with the anticipation rejection of claim 1, which rests upon the same assertion, applicant requests clarification of this grounds for rejection of claims 7 and 12 for the same reasons previously noted above in connection with the anticipation rejection of claim 1.

It is further asserted in paragraph 6 of the Official Action:

... it would have been obvious to one ordinary skill in the art at the time the invention was made to color match the cuff to the color of the dental prosthesis as it is well known and readily practiced in the art of dental prosthesis to chose cuffs and prosthetics which match an overall color to provide a more aesthetically pleasing overall appearance of the restoration site.

Again, the same grounds for rejection have been applied to the obviousness rejection of claim 1. As explained above, applicant specifically challenges the assertion that it is well known and readily practiced in the art to chose cuffs and prosthetics which match an overall color. To the contrary, applicant asserts that in the state of the art, such cuffs are provided only in one color, and no consideration is given with regard to matching that color with the color of the attached dental prosthesis. Thus, applicant challenges this ground for rejection on the same basis explained above and request that the Examiner furnish documentary evidence in support of the above-quoted grounds for rejection in the next Official Action, or withdraw the rejection.

For at least the reasons noted above, reconsideration and withdrawal of the rejection is respectfully requested. Claims 8, 13, 18 and 19 depend from either claims 7 or 12. Thus, these claims are also distinguishable over the applied prior art for at least the same reasons noted above in connection with the rejection of claims 7 and 12.

In addition, claim 7 recites "a ceramic dental prosthesis affixed to the abutment, wherein the abutment cuff is colored to match the color of the dental prosthesis," and claim 12 recites a method and includes "wherein the abutment cuff is colored to match the color of the dental prosthesis." The grounds for rejection imply that claims 7 and 12, including these limitations, have not been considered any differently than claim 1. Clarification as to how Rodgers et al. satisfies the requirements of claims 7 and 12 is respectfully requested.

CONCLUSION

From the foregoing, further and favorable action in the form of a Notice of Allowance is earnestly solicited. Should the Examiner feel that any issues remain, it is requested that the undersigned be contacted so that any such issues may be adequately addressed and prosecution of the instant application expedited.

Respectfully submitted,

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Date: January 26, 2006

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